

## INTERNATIONAL SEARCH REPORT

Internat Application No  
T/GB 03/03900A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 C07K14/00

Rec'd PCT/PTO 30 NOV 2005

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 C07K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

BIOSIS, MEDLINE, EPO-Internal, WPI Data, CHEM ABS Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 01 21646 A (COLYER JOHN ; PANDYA MAYA J (GB); UNIV SUSSEX (GB); WALSHAW JOHN (G) 29 March 2001 (2001-03-29) cited in the application see claims 1, 7, 12-13, 16-17 (with SAF-peptides), 23-24 and pages 3-4, 10-12, 19, 21-23 -----	1-36
Y	US 5 955 343 A (HOLMES TODD ET AL) 21 September 1999 (1999-09-21) see claims 1-4 and examples 3, 6, 8 ----- -/-	1-31, 34, 35

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

## \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \* & \* document member of the same patent family

Date of the actual completion of the international search

10 December 2003

Date of mailing of the international search report

13/01/2004

Name and mailing address of the ISA

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## INTERNATIONAL SEARCH REPORT

Internat Application No

PCT/B 03/03900

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	<p>PANDYA M J ET AL: "Sticky-end assembly of a designed peptide fiber provides insight into protein fibrillogenesis."  BIOCHEMISTRY. UNITED STATES 1 AUG 2000,  vol. 39, no. 30,  1 August 2000 (2000-08-01), pages  8728-8734, XP002264453  ISSN: 0006-2960  The documents discloses the SAF peptides,  such as the sequences disclosed in claim  30, see Exp. procedure and Fig.1-2</p> <p>---</p>	1-31
Y	<p>HOLMES T C ET AL: "Extensive neurite outgrowth and active synapse formation on self-assembling peptide scaffolds."  PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA.  UNITED STATES 6 JUN 2000,  vol. 97, no. 12, 6 June 2000 (2000-06-06),  pages 6728-6733, XP002264454  ISSN: 0027-8424  See Mat. and Methods page 6729, and pages  6730-31 and last paragraph of page 6733</p> <p>---</p>	1-36
A	<p>PADILLA JENNIFER E ET AL: "Nanohedra: Using symmetry to design self assembling protein cages, layers, crystals, and filaments"  PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES,  vol. 98, no. 5,  27 February 2001 (2001-02-27), pages  2217-2221, XP002264456  February 27, 2001  ISSN: 0027-8424  the whole document</p> <p>---</p>	1-36
P,A	<p>ZHANG SHUGUANG ET AL: "Design of nanostructured biological materials through self-assembly of peptides and proteins."  CURRENT OPINION IN CHEMICAL BIOLOGY.  ENGLAND DEC 2002,  vol. 6, no. 6, December 2002 (2002-12),  pages 865-871, XP002264457  ISSN: 1367-5931  the whole document</p> <p>---</p> <p>---  -/--</p>	1-36

## INTERNATIONAL SEARCH REPORT

Internat Application No  
GB 03/03900

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P, A	MOLL DIETER ET AL: "S-layer-streptavidin fusion proteins as template for nanopatterned molecular arrays." PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES, vol. 99, no. 23, 12 November 2002 (2002-11-12), pages 14646-14651, XP002264455 November 12, 2002 ISSN: 0027-8424 (ISSN print) the whole document	1-36
T	RYADNOV MAXIM G ET AL: "Engineering the morphology of a self-assembling protein fibre." NATURE MATERIALS. ENGLAND MAY 2003, vol. 2, no. 5, May 2003 (2003-05), pages 329-332, XP001156809 ISSN: 1476-1122 the whole document	1-36

# INTERNATIONAL SEARCH REPORT

International Application No. PCT/GB 03 03900

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.2

Claims Nos.: 1-21, 24-29

Present claims 1-21 and 24-29 relate to an extremely large number of possible peptides or proteins. In fact, the claims contain so many options that a lack of clarity (and/or conciseness) within the meaning of Article 6 PCT arises to such an extent as to render a meaningful search of the claims impossible.

Moreover, support within the meaning of Article 6 PCT and/or disclosure within the meaning of Article 5 PCT is to be found, for only a very small proportion of the possible peptides/proteins claimed.

Consequently, the search has been limited and carried out for those parts of the application which do appear to be clear (and/or concise), namely the examples of sequences cited in claims 22-23, 30 and 36.

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

# INTERNATIONAL SEARCH REPORT

ional application No.  
PCT/GB 03/03900

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
  
2. ☒ Claims Nos.: 1-21, 24-29  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:  
see FURTHER INFORMATION sheet PCT/ISA/210
  
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
  
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
  
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
  
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

Internat

Application No

PCT

B 03/03900

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 0121646	A	29-03-2001	AU 7532900 A	24-04-2001
			CA 2384849 A1	29-03-2001
			EP 1212356 A1	12-06-2002
			WO 0121646 A1	29-03-2001
			JP 2003511353 T	25-03-2003
US 5955343	A	21-09-1999	US 5670483 A	23-09-1997
			US 6548630 B1	15-04-2003

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Information on patent family members

International Application No

PCT/GB 03/03724

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 0121646	A	29-03-2001	AU 7532900 A	24-04-2001
			CA 2384849 A1	29-03-2001
			EP 1212356 A1	12-06-2002
			WO 0121646 A1	29-03-2001
			JP 2003511353 T	25-03-2003